

Driving Apparatus for Speed Changing and Steering of a Vehicle

Abstract

5 A driving apparatus (2) for speed changing and steering of a vehicle
consists of a first driving unit (21) for speed changing in advancing and reversing
and a second driving unit (22) for steering, which are arranged in a longitudinal
row and are attached to a vehicle chassis (12). Each of the first driving unit (21)
and the second driving unit (22) has a common structure, which comprises a
housing and an HST and left and right differential output shafts contained in the
10 housing. A left first differential output shaft (40L) and a left second differential
output shaft (44L) are connected with each other so as to be rotated in the same
direction, and a right first differential output shaft (40R) and a right second
differential output shaft (44R) are connected with each other so as to be rotated
in opposite directions. Both first and second HSTs of the first driving unit (21)
15 and a second driving unit (22) receives power from engine (11) through a
common single belt (30). A movable swash plate (57) of a hydraulic pump (51)
of the first HST is connected to a speed change pedal (15) and a movable swash
plate (76) of a hydraulic pump (71) of the second HST is connected to a steering
wheel (14).